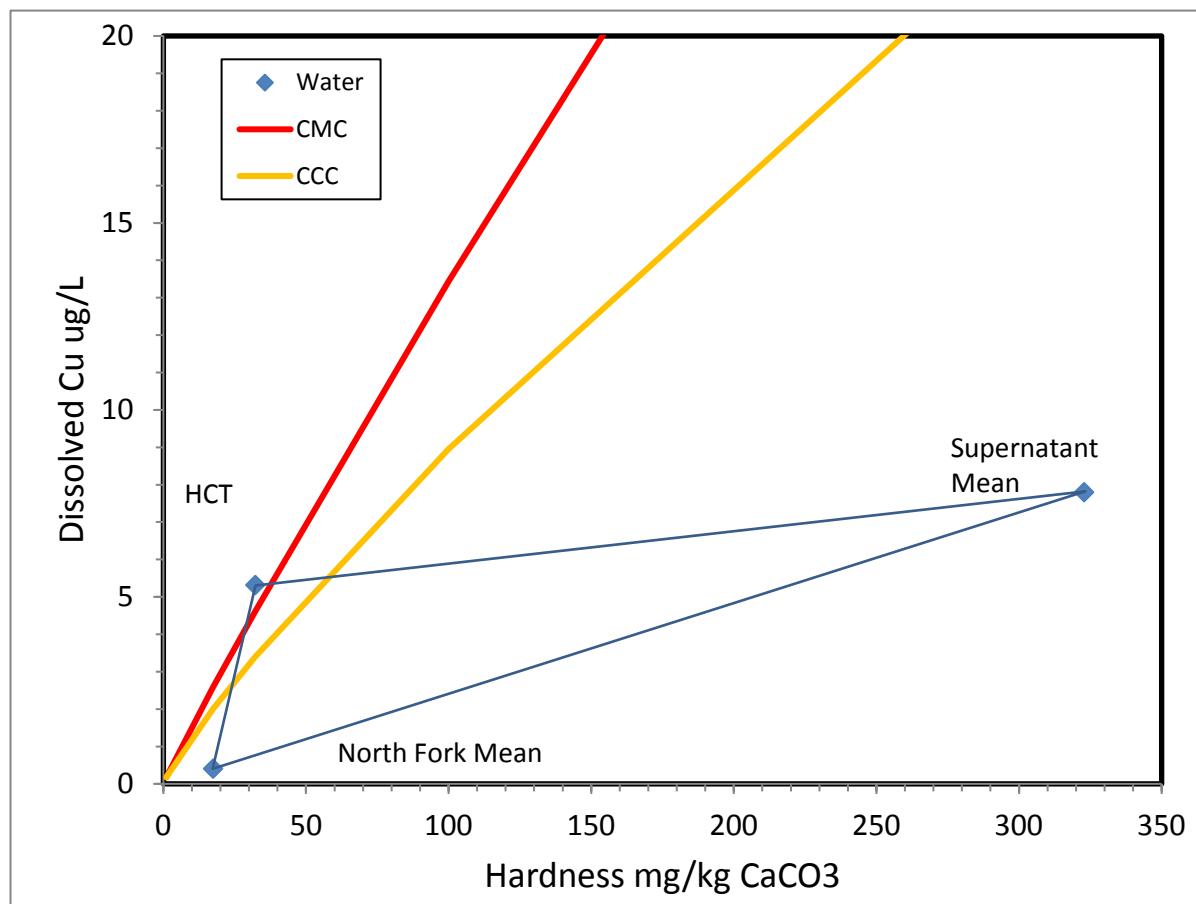


Sample	EBD Source	Mean Hardness	Std Dev	Mean	Std Dev
		mg/kg		Dissolved Cu	
NK100A	Appendix 9.1B	17.4	3.6	0.41	0.15
HCT	Table 11-49	32.2	6.5	5.32	1
Supernatant	Table 11-48	322.8	254.8	7.8	4.9
		400			



CMC CCC

0.18	0.18
2.59	2.01
4.62	3.40
13.44	8.96
40.54	24.38
49.62	29.28



GEOCHEMICAL CHARACTERIZATION - BRITSOL BAY DRAINAGES

TABLE 11-46

Results from Static Tests on Representative Tailings Samples, First Three Rounds (continued)

Sample ID	Product	Paste pH		Total S (%)	Sulfate (%)	Sulfide (%)
		(Std. Units)	(%)			
July 2004 Set						
1st Bulk Cl, Sc, TLS F66	Non-pyritic tails	7.8	0.1	0.0	0.1	
1st Bulk Cl, Sc, TLS F67	Non-pyritic tails	7.8	0.1	0.1	0.1	
1st Bulk Cl, Sc, TLS F68	Non-pyritic tails	7.9	0.1	0.0	0.1	
1st Bulk Cl, Sc, TLS F69	Non-pyritic tails	7.7	0.1	0.0	0.1	
Knelson TLS F66	Knelson TLS	8.0	0.1	0.0	0.1	
Knelson TLS F67	Knelson TLS	8.2	0.1	0.0	0.1	
Knelson TLS F68	Knelson TLS	8.1	0.1	0.0	0.1	
Knelson TLS F69	Knelson TLS	8.0	0.1	0.0	0.1	
RE 1st Bulk Cl, Sc, TLS F66	Non-pyritic tails	7.8	-	-	-	
RE Knelson TLS F69	Knelson TLS	8.0	-	-	-	
January 2005 Set						
Feed 1 Scavenger Tails	Scavenger	8.8	0.15	-0.01	0.15	
Feed 1 Bulk Cleaner Tails	Bulk Cleaner	8.8	0.23	0.01	0.22	
Feed 1 Scavenger Tails + Bulk Cleaner Tails	Non-pyritic tails	8.5	0.18	0.01	0.17	
Feed 2 Scavenger Tails	Scavenger	8.6	0.17	-0.01	0.17	
Feed 2 Bulk Cleaner Tails	Bulk Cleaner	8.3	0.31	-0.01	0.31	
Feed 2 Scavenger + Bulk Cleaner Tails	Non-pyritic tails	8.9	0.18	0.02	0.16	
November 2005 Set						
LT C1 Combined Rougher Tailing Rougher		8.5	0.16	0.02	0.14	
LT C1 Combined Pre-Cleaner Tailings	Pre-cleaner	7.8	1.82	0.09	1.73	
LT C1 Calculated	Non-pyritic tails	-	0.29	0.03	0.26	
LT C2 Combined Rougher Tailing Rougher		8.6	0.09	0.01	0.08	
LT C2 Combined Pre-Cleaner Tailings	Pre-cleaner	8.1	1.72	0.03	1.69	
LT C2 Calculated	Non-pyritic tails	-	0.21	0.01	0.20	
LT C3 Combined Rougher Tailing Rougher		8.7	0.17	0.01	0.16	
LT C3 Combined Pre-Cleaner Tailings	Pre-cleaner	7.5	3.61	0.09	3.52	
LT C3 Calculated	Non-pyritic tails	-	0.43	0.02	0.42	
LT C4 Combined Rougher Tailing Rougher		8.8	0.24	-0.01	0.24	
LT C4 Combined Pre-Cleaner Tailings	Pre-cleaner	7.9	4.19	0.07	4.12	
LT C4 Calculated	Non-pyritic tails	-	0.54	0.00	0.54	

of Metallurgical Testing, Pebble West Zone

AP (kg CaCO ₃ /t)	Fizz Rating (Unity)	NP _{Modified} (kg CaCO ₃ /t)	TIC (%)	TIC (kg CaCO ₃ /t)	NP/AP (ratio)	24 hr pH	Ag (mg/kg)	As (mg/kg)
2.2	Strong	11.6	-	-	5.3	-	0.66	15
2.8	Strong	11.3	-	-	4.0	-	0.68	15
3.4	Strong	12.0	-	-	3.5	-	0.76	12
3.1	Strong	8.1	-	-	2.6	-	0.69	12
2.5	Strong	7.9	-	-	3.2	-	0.39	12
4.1	Strong	9.8	-	-	2.4	-	0.51	14
3.1	Strong	10.4	-	-	3.3	-	0.38	11
2.5	Strong	6.5	-	-	2.6	-	0.37	9
-	Strong	11.8	-	-	-	-	-	-
-	Strong	6.8	-	-	-	-	-	-
4.7	None	19.9	0.35	29.2	4.2	1.76	0.49	20
6.9	None	19.6	0.36	30.0	2.9	1.85	0.82	29
5.3	None	17.4	0.34	28.3	3.3	1.87	0.52	20
5.3	None	24.4	0.48	40.0	4.6	1.80	0.42	19
9.7	None	23.3	0.46	38.3	2.4	1.78	0.84	29
5.0	None	25.9	0.49	40.8	5.2	1.86	0.52	20
4.4	None	14.8	0.3	25.0	3.4	1.58	0.47	14.8
54.1	None	16.1	0.34	28.3	0.3	1.78	2.17	50.8
8.16	None	14.90	0.30	25.25	1.8	-	0.6	18
2.5	None	16.9	0.53	44.2	6.8	1.83	0.28	8.8
52.8	None	21.8	0.75	62.5	0.4	1.87	2.04	45.9
6.33	None	17.27	0.55	45.56	2.7	-	0.41	12
5.0	None	17.2	0.46	38.3	3.4	1.80	0.26	27.2
110.0	None	12.5	0.45	37.5	0.1	1.77	2.12	169
12.99	None	16.84	0.46	38.27	1.3	-	0.4	38
7.5	None	24.9	0.41	34.2	3.3	1.81	0.27	13.2
128.8	None	18.6	0.32	26.7	0.1	1.76	1.3	57.9
16.73	None	24.42	0.40	33.60	1.5	-	0.35	17

Cd (mg/kg)	Co (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Hg (mg/kg)	Mn (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Pb (mg/kg)
0.24	4	273	995	0.56	316	53	142.5	33.8
0.28	4.2	276	693	0.5	492	31	148	88.4
0.08	7.1	271	461	0.36	463	47	136	17.2
0.13	8.4	196	632	0.35	571	41	98.5	7.8
0.07	2.4	160	652	0.18	238	52	66.9	19.1
0.18	2.7	166	564	0.1	390	29	74.9	58
0.03	5.2	163	338	0.18	378	36	71.2	8.8
0.06	6.1	135	403	0.19	490	38	57.4	4.8
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
0.15	4.4	69	853	0.02	348	92	12.7	11.5
0.25	5.5	68	1,265	0.03	394	45	15.9	17.7
0.15	4.5	59	889	0.02	351	40	13.7	12.6
0.11	4.8	58	575	0.02	398	60	14.7	8.6
0.19	6.3	54	998	0.04	455	57	20.5	13.7
0.18	5.4	61	636	0.03	417	55	16.7	10.2
0.06	4.3	112	380	0.02	340	41.6	16.2	14.6
0.17	28.4	451	1,560	0.08	491	101	255	37.2
0.07	6.13	137.79	470	0.02	351.49	46	34.37	16.32
0.13	5.3	87	288	0.09	406	44.6	13.4	6.8
0.4	33.6	670	2,050	0.06	689	188	395	34.9
0.15	7.45	131.36	422	0.09	427.53	55	42.43	8.94
0.09	4	85	241	0.04	641	27.2	11.9	6.1
0.24	45.9	748	1,585	0.19	880	153	452	25.5
0.10	7.19	135.45	343	0.05	659.18	37	45.39	7.58
0.07	3.8	77	261	0.03	492	21.4	12.2	4.6
0.11	39	598	853	0.1	554	87.9	363	14.1
0.07	6.48	116.64	306	0.04	496.72	26	38.89	5.32

Sb (mg/kg)	Se (mg/kg)	Tl (mg/kg)	Zn (mg/kg)
0.86	1	0.11	44
0.61	0.7	0.19	42
1.1	0.8	0.35	45
0.79	0.8	0.33	58
0.67	0.7	0.07	30
0.58	0.5	0.15	32
0.74	0.6	0.31	33
0.49	0.6	0.25	43
-	-	-	-
-	-	-	-
1.16	1.3	0.33	38
1.67	1.4	0.41	47
1.18	1.2	0.33	38
1.02	1	0.29	37
1.53	1.6	0.35	45
1.05	1.3	0.36	43
2	1.8	0.34	29
5.41	7.4	0.52	52
2.26	2.2	0.35	31
0.39	1	0.23	44
1.82	6.3	0.33	97
0.5	1.4	0.24	48
0.61	0.8	0.45	39
3.12	8.8	1.2	73
0.8	1.4	0.51	42
0.39	0.7	0.49	39
1.2	7.3	0.85	48
0.45	1.2	0.52	40

TABLE 11-47**Results from Static Tests on Representative Tailings Samples, Metallurgical Testing du**

Sample ID	Paste pH	C (T) (%)	CO ₂ (%)	TIC (CaCO ₃)	S (T) (%)	S (SO ₄) (%)	S (S-2) (%)
Pebble West Zone							
11840-003 bulk cleaner	7.95	0.45	1.1	25.0	0.78	0.03	0.75
11840-003 pyrite (Fig2)	6.60	0.52	1.3	29.5	1.44	0.2	1.24
11840-003 bulk float (Fig2)	7.92	0.52	1.1	25.0	0.17	0.03	0.14
11840-003 Phase II sands	8.55	0.37	1	22.7	0.26	0.01	0.25
11840-003 Phase II OF	8.33	0.48	1.1	25.0	0.1	0.01	0.09
Pebble East Zone							
PP08-3365	7.95	0.06	0.2	4.55	0.23	0.02	0.21
PP08-3607	8.11	0.07	0.3	6.82	0.17	0.02	0.15
PP08-3610	7.99	0.08	0.2	4.55	0.09	0.04	0.05
PP08-3614	8.18	0.1	0.3	6.82	0.11	0.02	0.09
PP08-3849	8.45	0.06	0.2	4.55	0.11	0.01	0.1
PP08-3850	8.58	0.05	0.2	4.55	0.29	0.02	0.27
11486-003	7.93	0.07	0.3	6.8	0.15	0.04	0.11
11486-005	7.89	0.08	0.3	6.8	0.16	0.05	0.11
11480-006	8.57	0.06	0.3	6.8	0.17	0.02	0.15
11846-003 bulk	8.41	0.06	0.3	6.8	0.12	0.01	0.11
11846-003 OF	7.85	0.07	0.3	6.8	0.17	0.06	0.11
11846-003 UF	8.72	0.05	0.2	4.5	0.21	0.01	0.2

Spring 2008, Pebble West and East Zones

AP (CaCO ₃)	NP (CaCO ₃)	Net NP	NP/AP (ratio)	Fizz Test (visual)	Ag (mg/kg)	AI (%)	As (mg/kg)	Au (mg/kg)
23.4	17.7	-5.7	0.8	Slight	1.05	1.42	46.4	<0.2
38.8	23.0	-15.8	0.6	Slight	1.46	1.27	63.2	0.2
4.4	22.3	17.9	5.4	Slight	0.33	1.29	12.6	<10
7.8	21.1	13.3	2.7	Slight	0.29	0.97	15.9	<0.2
2.8	25.2	22.4	9.0	Slight	0.28	1.44	8.8	<0.2
6.56	4.6	-2.0	0.7	None	0.57	0.93	7.4	< 0.2
4.69	5.7	1.0	1.2	None	0.75	1.1	9.1	< 0.2
1.56	6.3	4.7	4.0	None	0.44	0.48	6.4	< 0.2
2.81	5.7	2.9	2.0	None	0.3	0.33	4.2	< 0.2
3.13	6.2	3.1	2.0	None	0.23	0.44	4.2	< 0.2
8.44	6.3	-2.1	0.7	None	0.45	0.96	9	< 0.2
3.4	6.2	2.8	1.8	Slight	0.38	0.51	14	< 0.2
3.4	6.7	3.3	1.9	None	0.57	0.72	12	< 0.2
4.7	6.2	1.5	1.3	Slight	0.28	0.54	113	< 0.2
3.4	7.2	3.8	2.1	Slight	0.29	0.64	5.5	< 0.2
3.4	8.3	4.9	2.4	None	0.55	0.73	12.6	< 0.2
6.3	7.0	0.8	1.1	Slight	0.26	0.47	12.2	< 0.2

B (mg/kg)	Ba (mg/kg)	Be (mg/kg)	Bi (mg/kg)	Ca (%)	Cd (mg/kg)	Ce (mg/kg)	Co (mg/kg)	Cr (mg/kg)
<10	40	0.64	0.7	0.85	0.31	30.7	8.2	43
<10	40	0.53	1.03	1.06	0.19	31.2	12.7	130
<10	50	0.56	0.2	1.1	0.13	28.7	4.4	53
<10	40	0.34	0.25	0.8	0.16	17.7	3.4	71
<10	50	0.56	0.44	1.07	0.1	29.1	4	46
<hr/>								
< 10	20	0.24	0.26	0.28	0.12	16.1	4.8	33
< 10	20	0.29	0.76	0.3	0.11	19.75	5.1	38
< 10	30	0.23	0.86	0.35	0.09	11.25	3.5	11
< 10	20	0.2	0.28	0.29	0.08	7.97	2.5	6
< 10	30	0.18	0.76	0.27	0.1	7.22	2.2	141
< 10	20	0.26	0.41	0.25	0.1	15.4	5.3	108
< 10	20	0.29	0.31	0.29	0.13	11.15	3.6	24
< 10	30	0.34	1.3	0.35	0.11	15.6	4.8	34
< 10	20	0.22	0.35	0.26	0.12	9.55	2.9	101
< 10	30	0.25	0.26	0.34	0.09	13.45	3	45
< 10	30	0.33	1.98	0.35	0.13	18.15	5.1	48
< 10	20	0.19	0.5	0.25	0.15	9.89	3.3	78

Cs (mg/kg)	Cu (mg/kg)	Fe (mg/kg)	Ga (mg/kg)	Ge (mg/kg)	Hf (mg/kg)	Hg (mg/kg)	In (mg/kg)	K (%)
4.91	1180	3.07	6.68	0.09	0.07	0.1	0.03	0.7
4.06	506	3.97	5.26	0.1	0.08	0.08	0.032	0.67
4.02	312	2.8	5.53	0.09	0.06	0.03	0.019	0.73
2.51	476	2.15	4.47	0.06	0.06	0.04	0.014	0.61
4.28	142	2.65	6.03	0.06	0.07	0.03	0.017	0.72
2.46	967	1.32	4.21	0.06	0.02	< 0.01	0.015	0.43
2.92	788	1.44	5.19	0.06	0.02	0.01	0.016	0.51
1.64	308	0.85	2.01	< 0.05	0.02	< 0.01	0.014	0.17
1.22	323	0.59	1.39	< 0.05	0.02	< 0.01	0.01	0.11
0.84	414	0.57	1.64	< 0.05	0.02	< 0.01	0.009	0.19
1.75	1040	1.18	4.6	0.05	0.03	< 0.01	0.022	0.5
1.49	512	0.8	2.29	0.05	0.02	< 0.01	0.011	0.19
1.89	465	1.1	3.1	0.06	0.02	0.01	0.012	0.26
0.93	577	0.68	2.12	0.05	0.02	0.01	0.009	0.24
1.47	435	0.85	2.57	< 0.05	0.02	0.01	0.009	0.28
2.15	483	1.2	3.19	< 0.05	0.02	0.06	0.017	0.31
0.88	532	0.67	1.89	< 0.05	0.02	0.01	0.01	0.23

La (mg/kg)	Mg (mg/kg)	Mn (mg/kg)	Mo (mg/kg)	Na (%)	Nb (mg/kg)	Ni (mg/kg)	P (mg/kg)
15.2	7.3	1	474	0.05	0.14	22.1	850
15.1	7.2	0.92	607	0.04	0.18	27.8	890
13.7	7.5	1.05	532	0.05	0.14	13.7	1,350
9.1	4.5	0.8	394	0.03	0.14	11.3	870
15	6.7	1.05	520	0.03	0.13	14.1	1,320
7.5	14.9	0.8	113	0.01	0.13	20.1	290
9.3	18.4	0.91	127	0.01	0.2	23.5	340
5.7	6.1	0.28	126	0.01	0.11	8.5	320
3.9	4.7	0.19	97	0.01	0.11	6.6	270
3.6	4.4	0.17	97	0.01	0.13	6.3	240
7.3	15.8	0.7	95	0.01	0.13	20.6	260
5.4	9.6	0.31	103	0.01	0.14	8.7	270
7.5	10.8	0.42	131	0.01	0.17	12.2	310
4.6	7	0.26	93	0.01	0.11	7.8	260
6.8	7.8	0.37	116	0.01	0.12	9.3	290
9.1	9.5	0.44	133	0.01	0.17	13.6	310
4.9	5.3	0.24	84	0.01	0.11	7.1	230

Pb (mg/kg)	Rb (mg/kg)	Re (mg/kg)	S (%)	Sb (mg/kg)	Sc (mg/kg)	Se (mg/kg)	Sn (mg/kg)	Sr (mg/kg)
14.8	45	0.154	0.8	1.52	11.5	2.3	1.1	104
16.3	36	0.049	1.45	2.06	9.2	3.1	1.7	72.8
3.7	39.4	0.045	0.22	0.64	10.5	0.7	0.8	82.1
3.3	37.9	0.086	0.26	0.79	8.5	0.8	0.5	41.8
3.7	45.3	0.022	0.1	0.41	11.1	0.4	0.8	80.6
3.9	22.4	0.104	0.24	0.33	6.6	1.6	0.6	56.2
5.6	25.9	0.096	0.17	0.4	7.8	1.3	0.9	61
12.6	8.4	0.036	0.1	0.37	1.9	0.8	0.7	73.5
7.5	5.6	0.025	0.09	0.27	1.3	0.7	0.4	61.5
4.3	7.8	0.03	0.1	0.2	1.4	0.8	0.2	45.3
3.7	30.1	0.111	0.29	0.29	7	1.7	0.5	46.5
7.9	11	0.057	0.18	0.39	2.9	1.1	0.5	53
13.2	12.4	0.057	0.19	0.51	3.5	1.6	0.8	67.7
5.1	11.5	0.093	0.21	0.34	2.4	1.3	0.3	39.8
3.6	15.1	0.058	0.11	0.53	3.1	0.8	0.4	55.6
13.5	18.6	0.06	0.17	0.55	3.8	1.4	0.9	66.8
6.5	11.8	0.133	0.19	0.35	2.2	1.1	0.3	37

Ta (mg/kg)	Te (mg/kg)	Th (mg/kg)	Ti (mg/kg)	Tl (mg/kg)	U (mg/kg)	V (mg/kg)	W (mg/kg)	Y (mg/kg)
<0.01	0.46	2.6	0.075	0.49	0.74	118	0.68	11.6
<0.01	0.92	2.6	0.072	0.55	0.87	121	1.06	10.5
<0.01	0.12	2.2	0.097	0.37	0.67	124	0.5	13.35
<0.01	0.14	1.6	0.082	0.32	0.43	96	8.07	9.39
<0.01	0.12	2.3	0.09	0.34	0.69	123	2.78	14.05
<0.01	0.1	1.8	0.066	0.25	0.26	123	0.39	7.89
<0.01	0.1	2.2	0.071	0.27	0.29	149	0.44	8.78
<0.01	0.14	1.4	0.01	0.16	0.28	56	0.73	6.02
<0.01	0.08	1	0.009	0.11	0.2	36	0.91	4.86
<0.01	0.06	1	0.01	0.13	0.19	38	0.74	4.24
<0.01	0.08	1.9	0.066	0.31	0.24	112	0.83	7.63
<0.01	0.12	1.2	0.02	0.14	0.21	57	0.8	5.16
<0.01	0.21	1.6	0.021	0.2	0.27	81	0.79	6.48
<0.01	0.08	1	0.019	0.17	0.17	51	0.82	4.49
<0.01	0.11	1.3	0.024	0.15	0.22	68	1.15	5.67
<0.01	0.32	1.7	0.021	0.21	0.31	84	29.8	7.48
<0.01	0.08	1	0.017	0.14	0.17	47	3.23	4.58

Zn (mg/kg)	Zr (mg/kg)
238	2.7
191	2.4
138	2
51	1.4
149	2
125	<0.5
155	0.5
146	<0.5
90	<0.5
53	0.5
96	0.6
158	0.5
267	0.5
74	<0.5
149	<0.5
260	0.6
71	<0.5

GEOCHEMICAL CHARACTERIZATION - BRISTOL BAY DRAINAGES

TABLE 11-48
Analytical Results for Representative Tailings Supernatants

Sample ID	Product	Type	pH	Sulfate (mg/L)	Alkalinity (mg CaCO ₃ /L)	Hardness mg/kg
July 2004 Set						
Bulk Cl. Sc Tails F66 (3-6)	Non-pyritic	Lock-cycle Supernatant	7.87	174	51.8	178.08
Bulk Cl. Sc Tails F67 (3-6)	Non-pyritic	Lock-cycle Supernatant	7.96	152	55.8	164.27
Bulk Cl. Sc Tails F68 (3-6)	Non-pyritic	Lock-cycle Supernatant	7.96	191	74.8	203.74
Bulk Cl. Sc Tails F69 (3-6)	Non-pyritic	Lock-cycle Supernatant	8.15	107	95.8	138.17
Bulk Ro. Sc Tails F66 (3-6)	Scavenger	Lock-cycle Supernatant	7.64	216	37.5	202.186
Bulk Ro. Sc Tails F67 (3-6)	Scavenger	Lock-cycle Supernatant	7.8	216	42.8	193.278
Bulk Ro. Sc Tails F68 (3-6)	Scavenger	Lock-cycle Supernatant	7.86	214	55.5	195.827
Bulk Ro. Sc Tails F69 (3-6)	Scavenger	Lock-cycle Supernatant	8.08	113	83.8	125.141
P0410-Sample 1- Cu-Moly O/F	Copper-moly Overflow	Supernatant	7.68	1,265	51.5	406.684
P0410-Sample 2- Cu-Moly O/F	Copper-moly Overflow	Supernatant	7.02	2,436	29.8	1768.115
F97-1- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.16	317	60.5	340.543
F97-2- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.25	329	54.8	365.419
F97-3- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.15	389	52.3	388.617

F97-4- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.07	329	52.3	329.026
F97-5- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.25	369	54.8	379.806
F97-6- Ro,Sc, T/S	Scavenger	Lock-cycle Supernatant	8.27	339	51.3	375.337
F97-1-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.22	222	72.5	236.28
F97-2-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.14	282	101.5	315.67
F97-3-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.27	291	87.8	331.98
F97-4-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.25	292	91.3	342.8
F97-5-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.21	310	101.3	389.4
F97-6-1st, Bulk, Cl, Sc, T/S	Non-pyritic	Lock-cycle Supernatant	8.28	298	85.0	359.48

January 2005 Set

Feed 1 Bulk Cleaner	Bulk Cleaner	Supernatant	7.48	333	55.8	445.93
Feed 1 Scavenger	Scavenger	Supernatant	7.32	389	68.8	425.993
Feed 1 Combined Scav. & Bulk Clean.	Non-pyritic	Supernatant	7.66	383	76.8	434.29
Feed 2 Scavenger	Bulk Cleaner	Supernatant	7.82	339	69.0	372.52
Feed 2 Bulk Cleaner	Scavenger	Supernatant	7.34	294	55.0	354.75
Feed 2 Combined Scav. & Bulk Cleaner	Non-pyritic	Supernatant	7.77	283	48.5	287.4
Feed 1 Scavenger	Bulk Cleaner	Aged Supernatant	8.12	545	96.8	549.65
Feed 1 Bulk Cleaner	Scavenger	Aged Supernatant	7.96	445	87.5	486.41
Feed 1 Scav. & Bulk Clean.	Non-pyritic	Aged Supernatant	8.08	408	111.3	471.84
Feed 2 Scavenger	Scavenger	Aged Supernatant	7.98	414	83	456.93
Feed 2 Bulk Cleaner	Bulk Cleaner	Aged Supernatant	8.02	316	94.8	328.652
Feed 2 Scav. & Bulk Clean.	Non-pyritic	Aged Supernatant	7.98	451	73.5	468.006
Feed 1 Combined Tails	Non-pyritic	3 mo. Aged Supernatant	8.01	534	79.5	563.26
Feed 2 Combined Tails	Non-pyritic	2 mo. Aged supernatant	8.19	463	106.5	565.06

November 2005 Set

LTC1 Combined Rougher	Rougher	Supernatant	7.86	66	91.5	139.785
LTC1 Combined Pre-Cleaner	Pre-Cleaner	Supernatant	7.45	77	77	135.799
LTC1 Calculated	Non-pyritic	Supernatant	7.83	67	90.4	138.49
LTC2 Combined Rougher	Rougher	Supernatant	8.06	35	97.75	115.378
LTC2 Combined Pre-Cleaner	Pre-Cleaner	Supernatant	7.71	59	80.25	117.925
LTC2 Calculated	Non-pyritic	Supernatant	8.03	37	96.4	115.87
LTC3 Combined Rougher	Rougher	Supernatant	7.70	81	90.75	141.451
LTC3 Combined Pre-Cleaner	Pre-Cleaner	Supernatant	7.25	122	58.5	142.475
LTC3 Calculated	Non-pyritic	Supernatant	7.67	84	88.3	141.73
LTC4 Combined Rougher	Rougher	Supernatant	7.87	61	96.75	116.329
LTC4 Combined Pre-Cleaner	Pre-Cleaner	Supernatant	7.63	97	77.75	130.844
	Non-pyritic	Supernatant	7.85	64	95.6	118.53
LTC4 Calculated						
Average			7.899583	318.7083	74.838542	322.81554
Standard Deviation			0.298941	372.1002	20.353222	254.81885

Thiosalts								
	(mg S ₂ O ₃ /L)	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ag (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)
-	0.115	0.013	0.028	0.0017	0.000114	65	-0.0006	
-	0.103	0.009	0.026	0.000026	0.000054	58	-0.0005	
-	0.0283	0.013	0.015	-0.00001	0.00006	71	-0.0005	
-	0.0229	0.004	0.003	-0.00001	-0.00005	41	-0.0005	
-	0.0748	0.0109	0.0199	-0.00001	0.000108	75.2	-0.0006	
-	0.0684	0.00857	0.0203	-0.00001	0.000058	69.8	-0.0006	
-	0.0309	0.0113	0.0176	-0.00001	-0.00005	71	-0.0005	
-	0.0227	0.00431	0.00413	0.000023	-0.00005	40.2	-0.0005	
146	0.191	0.0396	0.117	-0.0001	-0.0005	159	-0.005	
826	0.185	-0.001	0.096	-0.0002	-0.001	707	-0.01	
-	0.0535	0.00569	0.021	-0.00002	0.00023	126	-0.001	
-	0.0829	0.00534	0.0207	-0.00002	-0.0001	137	-0.001	
-	0.0597	0.00527	0.0192	-0.00002	0.00012	145	-0.001	

-	0.0537	0.00581	0.0202	-0.00002	-0.0001	122	-0.001
-	0.0681	0.00552	0.0209	-0.00002	-0.0001	141	-0.001
-	0.0889	0.00496	0.0208	0.000021	-0.0001	141	-0.001
-	0.0508	0.006	0.029	-0.00001	0.000139	85	0.00112
-	0.0447	0.006	0.03	-0.00002	-0.0001	112	0.0028
-	0.0559	0.007	0.03	-0.00002	-0.0001	120	-0.001
-	0.0525	0.006	0.029	-0.00002	-0.0001	124	-0.002
-	0.0368	0.006	0.027	-0.00002	-0.0001	141	-0.001
-	0.0532	0.006	0.028	-0.00002	-0.0001	131	-0.001

-10	0.0121	-0.0001	0.00388	-0.00002	-0.0001	150	-0.001
-10	0.0188	0.00501	0.0023	-0.00002	0.0001	161	-0.001
-10	0.0250	0	0.006	-0.00002	-0.0001	146	-0.001
-10	0.0130	0.00357	0.00174	-0.00002	-0.0001	129	-0.001
-10	0.0116	0.00256	0.00105	-0.00002	-0.0001	105	-0.001
-10	0.0262	0.002	0.001	-0.00002	-0.0001	92	-0.001
-10	0.0604	0.00823	0.0172	-0.00002	-0.0001	201	-0.001
-10	0.0220	0.00871	0.0127	-0.00002	-0.0001	178	-0.001
-10	0.0278	0.00788	0.00605	-0.00002	-0.0001	152	-0.001
-10	0.0181	0.00476	0.00282	-0.00002	-0.0001	138	-0.001
-10	0.0361	0.00419	0.00734	-0.00002	-0.0001	127	-0.001
-10	0.0241	0.00576	0.0055	-0.00002	-0.0001	173	-0.001
-10	0.0167	0.00534	0.00316	-0.00005	-0.00025	203	-0.0025
-10	0.0252	0.00728	0.0117	-0.00005	-0.00025	207	-0.0025

28	0.339	0.00437	0.00887	-0.00001	-0.00005	49.6	-0.0005
-10	0.18	0.00607	0.00222	-0.00001	-0.00005	46.3	-0.0005
25	0.37	0.004	0.008	-0.00001	-0.00005	49	-0.0005
-10	0.0438	0.0012	0.00639	-0.00001	-0.00005	37	-0.0005
40	0.0348	0.00228	0.00111	0.000037	-0.00005	36.1	-0.0005
-6	0.043	0.001	0.006	-0.00001	-0.00005	37	-0.0005
40	0.0885	0.00309	0.0127	-0.00001	-0.00005	48.2	0.00058
-10	0.0381	0.00388	0.00212	-0.00001	-0.00005	45.1	-0.0005
36	0.085	0.003	0.012	-0.00001	-0.00005	48	0.0005
32	0.138	0.00362	0.0201	-0.00001	-0.00005	41.3	-0.0005
28	0.0749	0.00387	0.00137	0.00004	-0.00005	44.4	-0.0005
32	0.13	0.004	0.019	-0.00001	-0.00005	42	-0.0005
37.75	0.0717688	0.0059967	0.0171885	1.765E-05	-7.848E-05	116.00417	-0.0009854
158.0159	0.0745409	0.0058152	0.021218	0.0002503	0.0001755	101.15904	0.0016657

Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mn (mg/L)	Hg (mg/L)	Mo (mg/L)
0.00011	0.017	-0.03	0.000319	3.8	0.0375	0.000017	0.265
-0.0001	0.01	-0.03	0.000128	4.7	0.0487	-0.00001	0.051
0.00011	0.008	-0.03	0.000094	6.4	0.0488	-0.00001	0.053
0.00016	0.009	-0.03	0.000164	8.7	0.0736	-0.00001	0.034
0.00011	0.00896	-0.03	0.000072	3.46	0.0535	-0.00001	0.353
-0.0001	0.00707	-0.03	0.000051	4.58	0.0656	-0.00001	0.0706
0.00015	0.00626	-0.03	0.000055	4.47	0.0347	-0.00001	0.065
0.00017	0.0118	-0.03	0.000135	6.01	0.0578	-0.00001	0.0408
-0.001	-0.001	-0.03	-0.0005	2.24	0.00521	-0.0005	0.0426
-0.002	-0.002	-0.15	-0.001	0.15	0.0024	-0.0005	0.14
-0.0002	0.00917	-0.03	0.00131	6.23	0.088	0.000017	0.0694
-0.0002	0.00751	-0.03	0.00045	5.59	0.043	0.000016	0.0685
-0.0002	0.00943	-0.03	0.00038	6.37	0.0865	-0.00001	0.0761

-0.0002	0.0119	-0.03	0.00049	5.86	0.085	0.000012	0.0688
-0.0002	0.00889	-0.03	0.0002	6.66	0.0631	-0.00001	0.0732
-0.0002	0.00991	-0.03	0.00023	5.57	0.0457	0.000015	0.07
0.00013	0.011	-0.03	0.00015	5.8	0.0656	-0.00001	0.042
-0.0002	0.014	-0.03	0.00017	8.7	0.111	-0.00001	0.054
-0.0002	0.009	-0.03	0.00018	7.8	0.0723	-0.00001	0.056
-0.0002	0.01	-0.03	-0.0001	8.0	0.103	0.000024	0.053
0.00028	0.013	-0.03	0.00011	9.0	0.144	-0.00001	0.056
-0.0002	0.008	-0.03	0.00011	7.8	0.0836	-0.00001	0.053
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0.00026	0.00103	0.155	0.00152	17.3	0.148	-0.0001	0.0438
-0.0002	0.013	-0.03	-0.0001	5.73	0.065	-0.0001	0.0451
0.0003	0.002	2.15	0.0033	16.9	0.149	-0.0001	0.05
-0.0002	0.00826	-0.03	-0.0001	12.2	0.153	-0.0001	0.0443
0.00037	0.00644	-0.03	-0.0001	22.5	0.27	-0.0001	0.0806
-0.0002	0.006	-0.03	-0.0001	14.0	0.0402	-0.0001	0.025
-0.0002	0.0152	-0.03	-0.0001	11.5	0.0763	-0.00001	0.102
0.00025	0.0119	-0.03	0.00019	10.1	0.1	-0.00001	0.109
-0.0002	0.0142	-0.03	-0.0001	22.4	0.159	-0.00001	0.0775
0.00025	0.0115	-0.03	-0.0001	27.3	0.288	-0.00001	0.0671
-0.0002	0.00079	-0.03	0.00013	2.72	0.00637	-0.00001	0.0328
-0.0002	0.00932	-0.03	-0.0001	8.66	0.0839	-0.00001	0.0847
-0.0005	0.0171	-0.03	-0.00025	13.6	0.15	-0.00001	0.0661
-0.0005	0.0161	-0.03	-0.00025	11.6	0.122	-0.00001	0.0623

-0.0001	0.00733	-0.03	0.000178	3.85	0.0207	0.000015	0.0588
-0.0001	0.0042	-0.03	0.000139	4.89	0.0213	-0.00001	0.0675
-0.0001	0.007	-0.03	0.00018	3.9	0.021	0.000013	0.059
-0.0001	0.00193	-0.03	0.000125	5.58	0.00402	-0.00001	0.058
-0.0001	0.00677	-0.03	0.000188	6.75	0.0254	-0.00001	0.0903
-0.0001	0.002	-0.03	0.00013	5.7	0.0056	-0.00001	0.06
-0.0001	0.00159	-0.03	0.000292	5.11	0.0123	-0.00001	0.0254
0.00013	0.00155	-0.03	0.000065	7.25	0.055	-0.00001	0.0568
-0.000083	0.002	-0.03	0.00027	5.3	0.016	-0.00001	0.028
-0.0001	0.00283	-0.03	0.00123	3.19	0.00594	-0.00001	0.0181
-0.0001	0.00274	-0.03	0.000055	4.84	0.0253	-0.00001	0.0594
-0.0001	0.003	-0.03	0.0011	3.3	0.0074	-0.00001	0.021
-0.000123	0.0077642	0.0167708	0.000229	8.00125	0.0718613	-3.731E-05	0.0697417
0.00036396	0.0048514	0.316094	0.0006176	5.5296372	0.063068	0.000103	0.0560164

Ni (mg/L)	K (mg/L)	Se (mg/L)	Na (mg/L)	Tl (mg/L)	Zn (mg/L)
-0.0005	21	0.014	9	0.000154	0.0064
-0.0005	24	0.007	8	0.000183	0.0029
-0.0005	26	0.009	13	0.000131	0.0026
-0.0005	31	0.009	14	0.000113	0.0017
-0.0005	25.4	0.0171	11.9	0.000126	0.0015
-0.0005	31.4	0.0095	10.7	0.000178	0.0022
-0.0005	32.5	0.0102	15.7	0.000107	0.0048
-0.0005	35.1	0.0099	16.6	0.000112	0.0025
-0.005	4.47	-0.01	573	-0.0005	0.033
-0.01	8	-0.02	757	-0.001	0.037
-0.001	27.9	0.0131	11	0.00017	0.0042
-0.001	27.9	0.014	11.9	0.00016	0.0047
-0.001	30	0.0161	12.5	0.0002	-0.002

-0.001	28.7	0.0142	11	0.00019	-0.002
-0.001	30.1	0.0161	12.1	0.00018	-0.002
-0.001	29.6	0.0152	12.2	0.00019	-0.002
-0.0005	18	0.009	7	0.000146	-0.001
-0.001	24	0.011	9	0.00022	-0.002
-0.001	24	0.012	9	0.00020	-0.002
-0.001	25	0.013	10	0.00022	-0.002
-0.001	26	0.013	11	0.00022	-0.002
-0.001	24	0.012	10	0.00021	-0.002

0.001	30.3	0.0046	20.0	-0.0001	0.0027
-0.001	35.1	0.0068	18.8	-0.0001	0.0056
-0.001	30	0.007	19	-0.0001	0.0043
-0.001	30.5	0.0064	20.8	-0.0001	0.0103
0.002	29.3	0.0034	24.4	-0.0001	-0.002
-0.001	27	0.005	18	-0.0001	0.0037
-0.001	40.1	0.0083	22.5	0.00019	0.0035
-0.001	38.0	0.0070	21.7	0.00014	0.0054
-0.001	34.6	0.0042	19.2	-0.0001	0.0025
-0.001	34.3	0.0046	27.1	-0.0001	-0.002
-0.001	28.3	0.0075	19.6	-0.0001	0.011
-0.001	40.5	0.0072	29	-0.0001	0.0032
-0.0025	38.4	0.0102	30.8	-0.00025	0.0092
-0.0025	31.7	0.0054	20.3	-0.00025	-0.005

-0.0005	16.1	0.009	15.5	0.000051	0.0021
0.0009	13.6	0.0071	19	-0.00005	0.0021
-0.00039	16	0.009	16	0.000043	0.0021
-0.0005	12.2	0.0041	15.4	-0.00005	0.0036
0.00153	12.9	0.0045	22.5	-0.00005	0.0032
-0.00035	12	0.004	16	-0.00005	0.0036
-0.0005	24.4	0.0052	17.2	0.000096	0.0074
0.00198	23.5	0.0039	22.7	0.000075	0.0027
-0.00031	24	0.005	18	0.000094	0.007
0.00083	22	0.0037	22.6	0.000063	0.0184
0.00115	24.8	0.0038	26.8	0.000053	0.0015
0.00085	22	0.004	23	0.000062	0.017
-0.0007877	25.951458	0.0076104	43.78125	2.244E-05	0.004325
0.0017679	8.1557287	0.0062349	132.40085	0.0002146	0.007984

GEOCHEMICAL CHARACTERIZATION - BRISTOL BAY DRAINAGES

TABLE 11-49

Summary of Average Release Rates for Humidity Cells, Representative Tailings Samples, Pebble East and

Sample ID	Date Started	Date of Last	Alkalinity (mg/kg/week)	Hardness (mg/kg/week)
		Interpretative Data Review		
S2-Scavenger Tails	11-Feb-05	7-Oct-05	33	36.5
S2-Bulk Cleaner Tails	11-Feb-05	16-Oct-09	34	39.4
S1-Scavenger Tails	11-Feb-05	7-Oct-05	21	24.9
S1-Bulk Cleaner Tails	11-Feb-05	16-Oct-09	24	27.8
PP08-3365	23-Apr-08	14-Oct-09	24	32.0
PP08-3607	23-Apr-08	14-Oct-09	26	37.7
PP08-3610	23-Apr-08	14-Oct-09	26	32.5
PP08-3614	23-Apr-08	14-Oct-09	26	29.4
PP08-3849	23-Apr-08	14-Oct-09	22	22.1
PP08-3850	23-Apr-08	14-Oct-09	22	25.0
11486-003 bulk	22-Oct-08	14-Oct-09	26	27.1
11486-003 OF	22-Oct-08	14-Oct-09	27	40.5
11486-003 UF	22-Oct-08	14-Oct-09	24	24.1
11840-003 bulk float	10-Sep-08	14-Oct-09	42	38.6
11840-003 Phase II sands	22-Oct-08	14-Oct-09	39	36.9
11840-003 OF	22-Oct-08	14-Oct-09	45	41.5
Average			28.8	32.2
Standard Deviation			7.5	6.5

West Zones

Cl (mg/kg/week)	F (mg/kg/week)	SO ₄ (mg/kg/week)	Al (mg/kg/week)	Sb (mg/kg/week)	As (mg/kg/week)
0.26	0.087	8.9	0.012	0.0011	0.0041
0.24	0.044	11	0.0053	0.00049	0.00072
0.25	0.067	7.3	0.067	0.0035	0.017
0.26	0.03	7.9	0.014	0.0017	0.0035
0.23	0.077	9.9	0.0073	0.0004	0.00051
0.23	0.085	14	0.0072	0.0005	0.0005
0.23	0.57	8.8	0.007	0.00047	0.00035
0.23	0.49	5.4	0.0065	0.00045	0.00029
0.23	0.35	3.5	0.011	0.00039	0.00033
0.24	0.063	7.3	0.0089	0.00035	0.00026
0.23	0.49	7.6	0.0066	0.00041	0.0022
0.24	0.55	19	0.006	0.00049	0.0027
0.24	0.4	4.6	0.0084	0.00068	0.0027
0.39	0.066	5.7	0.0053	0.00088	0.0022
0.24	0.023	5	0.0056	0.0016	0.0028
0.24	0.089	8.8	0.0044	0.00052	0.002
0.25	0.218	8.4	0.0114	0.00087	0.00264
0.04	0.213	3.9	0.0151	0.00082	0.00404

Ba (mg/kg/week)	Be (mg/kg/week)	Bi (mg/kg/week)	B (mg/kg/week)	Cd (mg/kg/week)	Ca (mg/kg/week)
0.0072	0.000099	0.00025	0.0049	0.000025	11
0.0027	0.000096	0.00024	0.0048	0.000024	11
0.0018	0.000099	0.00025	0.0049	0.000026	8.6
0.003	0.000096	0.00024	0.0048	0.000024	8.5
0.0014	0.000092	0.00023	0.0048	0.000026	12
0.0016	0.000093	0.00023	0.0047	0.000027	14
0.0052	0.000099	0.00025	0.0053	0.000025	12
0.0058	0.000097	0.00024	0.0051	0.000031	11
0.0058	0.000096	0.00024	0.0052	0.000025	8.4
0.0011	0.000097	0.00024	0.0051	0.000025	9.5
0.0039	0.000093	0.00023	0.005	0.000023	10
0.0033	0.000095	0.00024	0.0067	0.000024	15
0.0061	0.000094	0.00024	0.0057	0.000025	9.1
0.0071	0.000091	0.00023	0.0052	0.000024	11
0.0086	0.000095	0.00024	0.0049	0.000024	11
0.0068	0.000093	0.00023	0.0053	0.000023	12
0.0045	0.000095	0.00024	0.0052	0.000025	10.9
0.0024	0.000003	0.00001	0.0005	0.000002	1.9

Cr (mg/kg/week)	Co (mg/kg/week)	Cu (mg/kg/week)	Fe (mg/kg/week)	Pb (mg/kg/week)	Mg (mg/kg/week)
0.00025	0.000052	0.0027	0.016	0.000031	2.2
0.00024	0.00005	0.0019	0.015	0.000028	2.9
0.00025	0.000049	0.0014	0.015	0.000033	0.83
0.00024	0.000049	0.0026	0.015	0.000029	1.6
0.00023	0.00009	0.0035	0.014	0.000033	0.49
0.00023	0.000098	0.0047	0.014	0.000027	0.65
0.00025	0.00013	0.0029	0.014	0.000031	0.6
0.00025	0.000084	0.0028	0.014	0.00003	0.46
0.00024	0.000071	0.0021	0.014	0.000038	0.27
0.00024	0.00009	0.0029	0.014	0.000041	0.31
0.00024	0.000069	0.0027	0.014	0.00003	0.5
0.00024	0.00018	0.0042	0.014	0.000029	0.72
0.00026	0.00033	0.003	0.014	0.000028	0.34
0.00024	0.000046	0.00093	0.014	0.000025	2.7
0.00025	0.000047	0.0018	0.014	0.000032	2.3
0.00023	0.000054	0.001	0.014	0.000028	2.8
0.00024	0.000093	0.00257	0.014	0.000031	1.23
0.00001	0.000073	0.00104	0.001	0.000004	1.00

Mn (mg/kg/week)	Hg (mg/kg/week)	Mo (mg/kg/week)	Ni (mg/kg/week)	K (mg/kg/week)	Se (mg/kg/week)
0.033	0.0000052	0.0051	0.0003	3.4	0.0005
0.03	0.0000049	0.011	0.00028	1.9	0.00053
0.0079	0.0000055	0.0044	0.00025	2.6	0.00049
0.013	0.0000049	0.0079	0.00026	1.3	0.00048
0.022	0.0000049	0.014	0.00025	2.1	0.00098
0.03	0.0000047	0.02	0.00029	2.3	0.0012
0.033	0.0000048	0.017	0.00029	1.9	0.0011
0.023	0.0000047	0.0097	0.00028	1.6	0.00092
0.026	0.0000047	0.0052	0.00025	0.64	0.00053
0.018	0.0000047	0.014	0.00026	0.91	0.00055
0.024	0.0000046	0.014	0.00023	1.7	0.00076
0.04	0.0000048	0.032	0.00026	2.2	0.0013
0.02	0.0000047	0.015	0.00024	0.75	0.00063
0.0029	0.0000046	0.03	0.00023	2.7	0.00047
0.004	0.0000047	0.047	0.00024	1.7	0.00047
0.014	0.0000047	0.012	0.00024	3.3	0.00054
0.021	0.0000048	0.0161	0.00026	1.94	0.00072
0.011	0.0000002	0.0114	0.00002	0.82	0.00029

Ag (mg/kg/week)	Na (mg/kg/week)	Tl (mg/kg/week)	Sn (mg/kg/week)	V (mg/kg/week)	Zn (mg/kg/w eek)
0.000005	1.1	0.000025	0.000053	0.0006	0.00071
0.0000048	1.1	0.000024	0.00005	0.00024	0.00061
0.0000049	0.99	0.000026	0.000052	0.0017	0.00066
0.0000048	0.96	0.000026	0.00005	0.00062	0.00066
0.0000047	0.92	0.000023	0.000046	0.00023	0.0018
0.0000046	0.94	0.000023	0.000046	0.00024	0.0021
0.0000049	0.96	0.000029	0.000049	0.00025	0.0019
0.000005	0.94	0.000026	0.000053	0.00024	0.0018
0.0000048	0.93	0.000024	0.00005	0.00025	0.0015
0.0000049	0.95	0.000024	0.000052	0.00025	0.0021
0.0000046	0.93	0.000023	0.0027	0.00023	0.002
0.0000048	1	0.000024	0.0022	0.00024	0.0027
0.0000049	0.94	0.000024	0.0032	0.00024	0.0033
0.0000046	1.3	0.000023	0.005	0.00024	0.00078
0.0000047	0.95	0.000024	0.0041	0.00025	0.00091
0.0000047	1.3	0.000023	0.0049	0.00023	0.00083
0.0000048	1.01	0.000024	0.0014125625	0.00038	0.00152
0.0000001	0.12	0.000002	0.0019371772	0.00037	0.00082

Grain size range μm	Median size μm	Relative mass %	Accumulated mass %	Cu content mg/kg
0 - 38	19	3.9	3.9	1230
38 - 45	42	3.9	7.8	1310
45 - 53	49	19	26.8	1260
53 - 75	64	7.1	33.9	1150
75 - 106	90	15.3	49.2	1000
106 - 150	128	9.2	58.4	1110
150 - 212	181	17.6	76.0	1140
> 212		24	100.0	1340

ine tailings from porphyry copper mining: Influence of particle size: Chemosphere, v. 60, p. 1497-1503.

G Cyclone Sands p. 1757

Date	Input	Output	Percentage
4/23/2008	750	440	58.7
	500	455	91.0
	500	465	93.0
	500	420	84.0
	500	445	89.0
	500	465	93.0
	500	470	94.0
	500	480	96.0
	500	490	98.0
	500	490	98.0
	500	445	89.0
	500	495	99.0
	500	495	99.0
	500	490	98.0
	500	475	95.0
	500	515	103.0
	500	480	96.0
	500	475	95.0
	500	470	94.0
	500	460	92.0
9/10/2008	500	465	93.0
	500	470	94.0
	500	485	97.0
	500	460	92.0
	500	460	92.0
	500	525	105.0
	500	455	91.0
	500	495	99.0
	500	515	103.0
	500	515	103.0
	500	420	84.0
	500	495	99.0
	500	465	93.0
	500	445	89.0
	500	505	101.0
	500	445	89.0
	500	420	84.0
	500	485	97.0
	500	500	100.0
	500	465	93.0
	500	480	96.0
	500	435	87.0
	500	485	97.0
	500	470	94.0
	500	465	93.0

	500	480	96.0
	500	465	93.0
	500	460	92.0
	500	480	96.0
	500	475	95.0
	500	470	94.0
	500	480	96.0
4/22/2009	500	520	104.0
average			94.8

S2 Scavenger

p. 1807

Date	Input	Output	Cu mg/L	Cu ug/L	SO4 mg/L
2/11/2005	0	1200	0.00856	8.56	184
	1	1500	1530		
	2	1500	1465	0.0083	8.3
	3	1500	1490		14.5
	4	1500	1465	0.00535	5.35
	5	1500	1455		12.8
	6	1500	1480	0.00504	5.04
	7	1500	1500		14.4
	8	1500	1485	0.0043	4.3
	9	1500	1480		13.4
	10	1500	1480	0.00537	5.37
	11	1500	1490		16.7
	12	1500	1485	0.005	5
	13	1500	1480		29.6
	14	1500	1490	0.00684	6.84
	15	1500	1485		24
	16	1500	1500	0.00596	5.96
	17	1500	1500		22.8
	18	1500	1500	0.00505	5.05
	19	1500	1490		25
	20	1500	1500	0.00404	4.04
	21	1500	1485		12.3
	22	1500	1470	0.00394	3.94
	23	1500	1435		24.2
	24	1500	1460	0.00627	6.27
	25	1500	1515		21
	26	1500	1500	0.00532	5.32
	27	1500	1470		16.3
	28	1500	1475	0.00436	4.36
	29	1500	1435		14.7
	30	1500	1455	0.00676	6.76
	31	1500	1450		15
	32	1500	1440	0.00933	9.33
	33	1500	1355		14.8
10/7/2005	34	1500	1445	0.00476	4.76
average			1473.03	0.00565	5.65
			98.2		17.8

